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Wise and Well: A Pilot Study on the Effects of Providing a Wellness Group Protocol to Enhance Occupational Fit Among Rural Community Dwelling Elderly Women

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WISE AND WELL: A PILOT STUDY ON THE EFFECTS OF PROVIDING A
WELLNESS GROUP PROTOCOL TO ENHANCE OCCUPATIONAL FIT AMONG
RURAL COMMUNITY DWELLING ELDERLY WOMEN

by

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An Independent Study

Submitted to the Occupational Therapy Department

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Master of Occupational Therapy

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APPROVAL PAGE

This Independent Study, submitted by Brianna Berendt and Carly Hills in partial fulfillment of the requirement for the Degree of Master of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.



Signature of Faculty Advisor

3.15.17

Date



Signature of Faculty Advisor

3/4/17

Date

PERMISSION

Title Wise and Well: A Pilot Study on the Effects of Providing a Wellness Group Protocol to Enhance Occupational Fit Among Rural Community Dwelling Elderly Women

Department Occupational Therapy

Degree Master of Occupational Therapy

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ABSTRACT

Wise and Well: A Pilot Study on the Effects of Providing a Wellness Group Protocol to Enhance Occupational Fit Among Rural Community Dwelling Elderly Women.

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and Nicole Harris, MOTR/L

Problem: There is a need for rural services for community-dwelling women due to a lack of resources, transportation, and social opportunities (Bacsu et al., 2016; Averill, 2012). Likewise, Shimada et al. (2014) emphasized the impact and causes of social isolation on elderly individuals and how important it is for elderly individuals to establish a support system when facing challenges throughout later life. A third problem was described by Choi et al. (2013) in that elderly individuals may experience a loss of independence and functional decline can result from being physically inactive. This indicates that there are increased health risks and may be functional limitations for elderly individuals who participate in physical exercise; however, finding a balance of maintaining independence and improving well-being is important for older individuals (Choi et al., 2013) Lastly, measuring quality of life may suggest information for creating evidence-based interventions to improve health outcomes (Scogin et al., 2016).

Methodology: IRB approval was obtained through the University of North Dakota prior to beginning this study. Participants were recruited by hanging flyers within the Casper, Wyoming community. Eight participants started the program, but two dropped out, so there was a total of six participants overall in our study. Written informed consent was

obtained during the first session of the study. The participants consisted of well women over the age of 60 living in the Casper, Wyoming community. The seven-week program took place at a local Lutheran church in Casper, Wyoming. A group protocol was used to guide the wellness program (Peinovich, Triller, & Stube, 2015). A mixed methods study was completed in order to determine effectiveness in increasing quality of life in elderly community-dwelling women who live in a rural area. The World Health Organization Quality of Life Brief form was used as an outcomes measure to determine if there was an increase in quality of life among participants. Qualitative data was obtained through session summaries and a feedback survey that was completed at the end of the program.

Results/Conclusions: It was found that this program had an impact on the participants within our study, but the sample size wasn't large enough to show statistical significance in measuring quality of life. There was significance found in Physical Health, Environmental Factors, and Overall Health domains. There was a correlation between Physical Health and Psychological domains at pre- and post- assessment, and a correlation between Environmental Factors and Overall Health at pre- assessment, but not at post-assessment. The qualitative data suggests that the women enjoyed the group and were able to make social connections and identify techniques to remain independent within their homes. Although the results of the WHO-QOL BREF were not statistically significant, qualitatively the participants described the importance of overall health, living independently within the community, forming social bonds, having intergenerational discussions, and controlling factors that contribute to overall quality of life.

CHAPTER I

INTRODUCTION

Rationale

“Among the 7.3 billion people worldwide in 2015, an estimated 8.5 percent, or 617.1 million, are aged 65 and older. The number of older people is projected to increase more than 60 percent in just 15 years—in 2030, there will be about 1 billion older people globally, equivalent to 12.0 percent of the total population” (He, Goodkind, & Kowal, 2015, p.3). In 2012, 56.4% of the population aged 65 and older were female in the United States (Ortman, Velkoff, & Hogan, 2014). In the United States, there is an estimated 5 million women, 65 years and older, who live in rural areas (Bennett, Lopes, Spencer, & Van Hecke, 2013). The need to provide resources for elderly women in rural areas will continue to grow due to the population of aging individuals rapidly increasing. A wellness program that addresses the factors that contribute to an increased quality of life would be a great resource for elderly women living in rural areas to participate in as the elderly population continues to rise.

There are various factors such as, geographic location, social participation, physical health, leisure engagements, and mental health, which impact quality of life during the aging process and may create a need for extra support for elderly women living in rural areas. According to Stones and Gullifer (2016), many elderly individuals choose to age in place by remaining at home. Living in rural areas as an elderly

individual has some drawbacks, such as lack of resources (Bacsu et al., 2016) and possibly a smaller social circle or social isolation. According to Bennett, Lopes, Spencer, and Van Hecke (2013), access to healthcare facilities and public transportation are issues that elderly people living in rural areas may experience.

Agahi, Silverstein, and Parker (2011) found that elderly women may receive more enjoyment in comparison to men when social relationships are formed outside of organized activities. Thomas, O'Connell, and Gaskin (2013) reported leisure activities were utilized to facilitate social interactions among elderly individuals. The participants in the study claimed to have attended the group activities for socialization reasons rather than to participate in the leisure activity. Thomas et al. (2013) and Agahi, Silverstein, and Parker (2011) found that the participants benefitted from social engagements whether it was inside or outside an organized leisure activity.

Theoretical Framework

The Person-Environment-Occupation (PEO) model was used to develop a group protocol by Peinovich, Triller, and Stube (2016) for the current research study. The person and environment factors of the PEO model are transactive, which means that the components cannot be separated and examined individually, as well as mutually influencing, meaning the components all affect each other (Law et al., 1996; Turpin & Iwama, 2011). The outcome of the three factors working together creates occupational performance (Turpin & Iwama, 2011). The PEO model focuses on occupational participation and is used to find the optimum occupational fit in order to enhance engagement and participation within occupations that are meaningful to an individual (Law et al., 1996). When all three components of the model are congruent, an individual

has a greater chance of experiencing optimum occupational performance. In the current research study, the participants are asked to reflect upon personal factors, environmental supports and barriers in their everyday lives and the occupations each individual engages in. The researchers have identified and addressed throughout the program how this transactive relationship impacts the participants' occupational performance, which is a key component of the program.

Statement of the Problem

Elderly community-dwelling women living in rural areas may lack opportunities to engage in social interactions, leisure pursuits, and physical and mental health awareness, which can lead to an overall decreased quality of life. The relationship between the women, their environments, and their occupations may not be optimum due to a lack of resources and opportunities while living in rural areas. This results in a low occupational "fit" according to the Person-Environment-Occupation Model (Turpin & Iwama, 2011, p. 100).

Hypothesis

It is hypothesized that there will be an overall increase in quality of life in the participants' lives after the 7-week wellness program is completed, as measured by the World Health Organization Quality of Life Brief form (WHO-QOL BREF) (see Appendix A). It is also hypothesized that the participants in this wellness program will describe an overall increase in social participation and connections, as measured by a feedback survey at the end of the 7-week wellness program.

Assumptions

All of the participants within the study are well elderly women who have no signs

of cognitive deficits. They all have the ability to drive or have a means of transportation. The participants enjoy their independence and the ability to live within their homes in the community. The participants are aware of the different aspects of aging and are willing to participate in this wellness group in order to prevent negative aspects of aging.

Scope and Delimitation

The principle variables within the study include the women who participated in the wellness program and their quality of life. The seven-week wellness program took place at a Lutheran church in central Wyoming. The sessions included an introduction outlining the goals of the session, a warm-up activity to get the participants thinking about the topic of the session, as well as an activity related to the topic and an opportunity for the participants to discuss their ideas and perceptions of the activity (Peinovich, Triller, & Stube, 2016). The program was implemented in the fall of 2016 to analyze the efficacy and successfulness of the wellness program. The topics of the sessions included physical health, independent living, cognition, mental health, and intergenerational discussion. To do this, the student researchers analyzed the participants' perceptions of their quality of life using the WHO-QOL BREF before and after the program took place. The student researchers conducting this study were interested in this topic of rural community-dwelling elderly women due to growing up in rural areas and having close ties with grandparents.

Importance of the Study

This study provides an example of a type of wellness program that can be carried out within the community and benefit this population. This wellness program provides social engagements and other opportunities to women in order to gain access to resources

within rural communities. This study produces more research and contributes to the gap in current literature regarding elderly community-dwelling women living in rural areas.

Definition of Terms

Aging-in-place: “Aging in place is a term used to describe a person living in the residence of their choice, for as long as they are able, as they age. This includes being able to have any services (or other support) they might need over time as their needs change.” (Ageinplace.com, 2015)

Community-dwelling: Individuals who are active within the community where they live in their homes.

Elderly: Individuals who are the age of sixty years old and older.

Occupation: “Various kinds of life activities in which individuals, groups, or populations engage, including activities of daily living, instrumental activities of daily living, rest and sleep, education, work, play, leisure, and social participation” (American Occupational Therapy Association, 2014, p. S19).

Occupational Fit: An occurrence when the factors of person, environment, and occupation align to promote optimum occupational performance (Turpin & Iwama, 2011).

Quality of Life: “Individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns” (World Health Organization Quality of Life Group, 1997, p. 5).

Rural: “A State that has a population density of 57 or fewer persons per square mile or a State in which the largest county has fewer than 150,000 people, based on the most recent decennial census” (U.S. Code 42, 2012).

Social Participation: “The interweaving of occupations to support desired engagement in community and family activities as well as those involving peers and friends” (Gillen & Boyt Schell, 2014, p. 607).

CHAPTER II

LITERATURE REVIEW

The process of aging for women comes with many positive and negative life issues. Some positive aspects of aging include becoming a grandmother, retirement, engaging in hobbies and interests, and growing old with a spouse. Some negative aspects of aging include chronic health problems, financial issues, and widowhood. For many older women, a combination of both positive and negative aspects can be experienced throughout aging. It is important to note that with age there are many individual, contextual, and occupational changes that take place (Vrkljan, Leuty, & Law, 2011). Elderly individuals may find it meaningful to age in place and remain at home, even if that means residing in a rural area. Living in a rural area can result in additional limitations for elderly women experiencing deficits in physical and mental health or barriers in social and leisure pursuits. Problems in these areas can lead to quality of life and wellness issues. Overall, there are various factors such as, geographic location, social participation, physical health, leisure engagements, and mental health, which impact quality of life during the aging process and may create a need for extra support for elderly women.

Rural Community Dwelling Elderly Individuals

Many elderly individuals choose to remain at home, despite the many options that are available for housing and aging in the community. In a study by Vrkljan et al. (2011),

the authors conducted interviews and found that some elderly individuals make extensive renovations to their homes in order to age in place rurally. Other participants reported that they hire private help and rely on family and friends to assist with daily occupations to maintain a community-dwelling status (Vrkljan et al., 2011). Sometimes, finding assistance or support in small communities can be difficult. Living in rural areas as an elderly individual has some drawbacks, such as lack of resources (Bacsu et al., 2016) and transportation (Averill, 2012), being further away from essential services such as doctor offices (Vrkljan et al., 2011), and possibly a smaller social circle. There may also be some cultural, language, or economic barriers to living rurally (Averill, 2012). Despite some of the disadvantages of living in a rural area as an elderly individual, there are quite a few positive aspects of being community-dwelling, which means living in one's own home within a community, that contribute to quality of life.

According to Stones and Gullifer (2016), many elderly individuals choose to age in place by remaining at home. The participants in the study found that living at home promoted autonomy and control, allowed the individuals to maintain relationships, and assisted in living in the present while keeping memories alive (Stones & Gullifer, 2016). Similarly, in a study by Bacsu et al. (2014), the authors identified five themes which gave insight on why elderly individuals choose to age in place and stay at home. These five themes included social interaction, keeping active, independence, optimistic mental outlook, and cognitive health. Elderly people may have an attachment to their homes; not only the physicality of the home, but the experiences and memories that the house may hold (Stones & Gullifer, 2014). Another reason elderly individuals want to stay in their homes is that residential care may seem like a “dead end” due to losing meaningful social

interactions with family and friends, as well as a loss of independence (Vrkljan et al., 2011, p. 156).

According to Averill (2012) living rurally typically holds certain values and belief systems within a community that doesn't occur when living in a larger urban setting. Rural communities tend to maintain a tighter bond to heritages and cultures. One belief system that is usually highly regarded in smaller communities include religious beliefs and the obligations that are tied to religion. Religious services are typically more uniform and common in smaller rural communities which provide opportunities for more social and spiritual activities (Averill, 2012).

Social Participation

Social participation is one of the reasons many elderly individuals choose to continue to live at home in rural areas. Social participation for many elderly individuals consists of interacting with family, friends, and neighbors (Bacsu et al., 2014) which can contribute to quality of life and facilitate aging in place. Stones and Gullifer (2016) found that a central theme to aging in place was "Attachment to place: independent living has relational utility and gives purpose to life" (p. 465). Participants reported that living at home in old age allows for personal expression and provides a platform to connect with others while being themselves (Stones & Gullifer, 2016).

Connecting with others on a personal level seems to have a mutual benefit when reciprocity of friendship is exchanged (Bacsu et al., 2014). Participants reported that being with friends around the same age as themselves allows for understanding of the aging process and shared experiences (Bacsu et al, 2016). However, keeping a social circle can be difficult for elderly individuals, especially in rural areas, given the

circumstances of proximity to resources, fewer people in the area, and declining health statuses. One of the drawbacks of maintaining friendships with other elderly people, as an elderly person, inevitably means that friendships may be lost due to death and dying. Losing special people may cause elderly individuals to experience a wide variety of emotions, including loneliness.

Loneliness is a prominent emotion for many elderly individuals. In a study by Smith (2012), loss of a spouse was one of the main themes that was found to contribute to feelings of loneliness in elderly individuals. Particular holidays and traditions brought on feelings of loneliness and grieving for widowed participants (Smith, 2012). Going to certain places within the community, such as church, was also found to be difficult to attend after the loss of a spouse (Smith, 2012). Emotional connections and physical limitations may inhibit elderly individuals from participating in social activities resulting in possible social isolation.

Along with loneliness, social isolation can also be experienced by elderly individuals. According to Shimada et al. (2014), a high prevalence of social isolation was shown within the community-based elderly population who participated in the study. Shimada et al. (2014) emphasized the impact and causes of social isolation on elderly individuals and how important it is for elderly individuals to establish a support system when facing challenges throughout later life. Maintaining relationships with friends and family as a social support is key in having a decrease in seclusion among elderly women (Shimada et al., 2014). Taking steps to prevent social isolation in community-dwelling elderly individuals may promote quality of life within this population.

Social participation is an occupation that is vital to aging and remaining community dwelling. Making new friends or maintaining old ones may be difficult for individuals in rural areas due to a wide variety of factors. Participants in the study by Bacsu et al. (2014) identified that they would like more interaction with younger people, but are not sure how to initiate such interactions. Transportation has been noted as a link to the world outside of the home (Vrkljan et al., 2011). In rural areas, public transportation can be inconvenient or lacking altogether, thus limiting socialization and accessing resources. Accessibility to resources and having a driver's license indicate that transportation is essential to reaching out beyond home life and engaging socially with others (Levasseur et al., 2015). Environmental factors such as weather, transportation, and location all play a role in the quality and frequency of social participation among elderly individuals in rural areas. Community mobility and physical mobility are also important for people of all ages to be able to participate in daily activities, especially socialization. Having good mobility in old age has been found to be a key feature in engaging in all occupations, specifically social participation (Bacsu et al, 2014). Elderly individuals may be cooped up in their homes due to many factors; however, social participation is a vital activity to maintain and promote quality of life.

Physical Health

Participating in regular physical activity may be one way for community-dwelling elderly women to maintain a healthy life and experience satisfaction when aging. The effects of participating in moderate or vigorous physical activity were analyzed in elderly women living in Britain over a seven-year period (Choi et al., 2013). The authors concluded that when elderly women engaged in moderate or vigorous physical activity in

later life, a decrease in health-related quality of life was prevented (Choi et al., 2013). This is similar to the findings of Vagetti et al. (2015). Vagetti et al. (2015) also concluded that when elderly women participated in physical activity, an increase in quality of life was experienced.

Physical activity interventions can be as simple as walking because it is affordable and can be incorporated into elderly women's daily lives (Vagetti et al., 2015). Other methods of promoting health related quality of life (HRQL) by increasing physical activity factors would include working toward a fast gait speed, balance, lower body strength, and lowering one's body mass index (Sartor-Glittenberg et al., 2014). These factors play a role in independence among the elderly population because they are essential for mobility and completing daily tasks. As well as increasing quality of life among older populations, physical activity can also prevent disease among elderly women. Experiencing a loss of independence and functional decline can result from elderly individuals being physically inactive (Choi et al., 2013). There are increased health risks and may be functional limitations for elderly individuals who participate in physical exercise; however, finding a balance of maintaining independence and improving well-being is important for older individuals (Choi et al., 2013).

Poor sleep quality is another physical health issue that older individuals may experience. A study by Li et al. (2013) explored the sleep quality of elderly individuals living in rural China. Li et al. (2013) found that almost half of the participants within the study reported having poor sleep quality. Similarly, participating in low-intensity physical and mental activities on a regular basis has shown to improve self-reports of increased sleep quality in elderly community-dwelling individuals (Pa et al., 2014).

Another benefit from engaging in physical activity is experiencing better sleep and less insomnia symptoms. In a study conducted by Endeshaw and Yoo (2015), a significant association between insomnia symptoms, organized social activities, and walking was reported. The participants within the study who were less likely to experience insomnia symptoms, engaged in regular social activity or walking exercise (Endeshaw & Yoo, 2015). According to Li et al. (2013), some elderly individuals may not know the importance of getting enough sleep or the importance of talking with medical professionals to discuss interventions to help sleep better at night.

Leisure Engagements

While leisure activities are important for quality of life, such activities may not be attainable for some elderly women. Aside from living in a rural area, Thomas, O'Connell, and Gaskin (2013) acknowledged other factors that affect participation in leisure activities such as poor health, family, transportation, and geography. Chronic conditions and other disabilities may hinder elderly individuals from participating in hobbies and activities once enjoyed (Thomas, O'Connell, & Gaskin, 2013). Having family members' support helped the elderly individuals increase their motivation and participation for social and leisure outings (Thomas, O'Connell, & Gaskin, 2013). Some of these factors impede motivation to participate in regular leisure pursuits, however, by participating in more leisure activities and hobbies, elderly individuals may have something to look forward to within their day to day life and may provide other benefits.

According to "Population" (2012) on agingstats.gov, in 2010 "women age 65 and over were three times as likely as men of the same age to be widowed. Nearly three-quarters (73 percent) of women age 85 and over were widowed, compared with 35

percent of men” (para. 1). This indicates that women who are grieving or who are without a spouse, may need extra supports from family, friends, and the community. Naef et al. (2013) identified attending religious activities, visiting with friends, gardening, walking, and reading as some examples of the leisure activities that helped elderly widows occupy their spare time.

Participating in leisure engagements can be beneficial in many ways for elderly individuals. Agahi, Silverstein, and Parker (2011) noted that participating in late-life hobby activities and study groups were associated with a higher life expectancy among women. Another main benefit of participating in leisure activities may be experiencing an increase in well-being and quality of life. According to Agahi, Silverstein, and Parker (2011), physical activities, volunteering, and attending cultural events promoted a positive well-being in elderly populations.

Because of the lack of leisure and recreational facilities in rural areas for elderly individuals, a qualitative study was completed by Conde (2012). The purpose was to obtain opinions of elderly individuals through semi-structured interviews regarding participation in leisure activities within the community. Conde (2012) found that when elderly individuals were given opportunities to engage in leisure activities, well-being was maintained. Scogin, Morthland, DiNapoli, and LaRocca (2016) reported that elderly adults who are experiencing depressive symptoms may not engage in as many enjoyable activities as they typically would. When elderly individuals do not engage in meaningful activities, a decline in mood and activity engagement may result, thus, causing a lower quality of life among older adults living in rural areas (Scogin et al., 2016). Scogin et al. (2016) concluded that providing interventions that offer opportunities for older rural

adults to engage in meaningful activities may prevent elderly individuals living in rural areas from having high levels of hopelessness and promote an improved quality of life.

Mental Health

Henderson, Crotty, Fuller, and Martinez (2014) conducted a study to evaluate the services provided for mental health in rural areas of Australia. One of the three major themes that were identified in the study included the barriers to the access of services and the unmet needs of the individuals living in rural Australia (Henderson et al., 2014).

According to Henderson et al. (2014), older adults living in rural areas may be limited in access and resources for mental health services. Some of the reasons for poor utilization of the mental health services include lack of trust in services and healthcare workers, poverty, stigma, and different views on mental illness (Henderson et al., 2014). Bocker, Glasser, Neilsen, and Weidenbacher-Hoper (2012) also concluded that older adults living independently in rural communities face many barriers when receiving treatment for mental health diagnoses, specifically depression. Elderly individuals who live in rural communities may have a greater risk in developing depression and experiencing a reduced quality of life (Scogin et al., 2016).

Depression is common among elderly individuals, especially women (Del Brutto et al., 2014), and can impact one's physical and psychological functioning and negatively impact health related quality of life (HRQOL) (Azizan & Justine, 2016, p. 45). Azizan and Justine (2016), found that a combination of exercise and behavioral training has the "potential to improve mood, motivation, and self-esteem, which could enhance quality of life among older adults" who are experiencing depression or depressive symptoms (p. 51).

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In order to deal with aging limitations and maintaining or improving quality of life, older adults will need to adopt coping strategies. In a study by Levasseur and Couture (2015), coping strategies that were problem-focused and emotion-focused were identified in elderly participants who dealt with the issues that come with aging, participation in activities, and quality of life. Problem-focused coping strategies include distancing and self-controlling behaviors, while emotion-focused coping strategies include seeking social support, problem solving, and positive appraisal (Levasseur & Couture, 2015). These coping strategies are important for healthcare providers and family members to be aware of because cognitive and emotional mental health problems may arise as elderly individuals age. Emotional mental health, cognition, and memory within the elderly population may have an impact on each other. Del Brutto et al. (2014) also found that elderly individuals who reported symptoms of depression and anxiety had adverse results on cognitive testing.

Del Brutto et al. (2014) state that the connection “between psychological distress and cognitive decline is bidirectional and complex” (p. 512). This gives evidence and insight to how emotional well-being can impact an individual’s cognitive state. Likewise, in a study by Kaup, Nettiksimmons, LeBlanc, and Yaffe (2015), the authors found that participants who reported having subjective memory complaints had signs and were at higher risk of having mild cognitive impairment 20 years later. Overall, higher level cognitive skills such as memory and recall, as well as emotional well-being are important in community-dwelling older adults in order to live safely and independently with a positive quality of life.

It is important to be aware of the symptoms of poor mental health in the elderly population. Mental health could play just as large of a role as physical health in quality of life. Much like physical health, it is beneficial to diagnose mental health problems or identify mental health symptoms as soon as possible. A study completed by Monteso et al. (2012), highlights the importance of disease prevention and early detection to protect elderly individuals from the risk factors of depression and other mental health diagnoses. It is also important to understand the effects a mental health diagnosis can have on elderly individuals; especially among women, because women have a higher rate of depression when compared to men (Monteso et al., 2012). Lastly, mental health issues such as cognitive or emotional problems, may cause a variety of medical problems that amplify or worsen and interfere with quality of life (Del Brutto et al., 2014). There are many factors that play into the quality of life within elderly individuals, specifically women, which need to be taken into account in order to maintain or promote overall quality of life.

Conclusion

Overall, geographic location, social participation, physical health, leisure engagements, and mental health are all factors that affect an elderly woman's quality of life. Living in rural areas may provide some barriers as well as positive aspects to elderly individuals. According to Vrkljan, Leuty, & Law (2011) living in rural areas causes elderly individuals to be farther away from essential services, such as doctor offices. Averill (2012) noted that living rurally typically holds certain values and belief systems within a community that does not occur when living in a larger urban setting, which may be an important and positive aspect to elderly individuals. Another essential component

of daily life for elderly individuals is engaging in social pursuits and maintaining relationships to promote a positive well-being. Shimada et al. (2014) emphasizes the importance for elderly individuals to maintain healthy relationships with family and friends so that social isolation is not experienced and quality of life can be maintained. Elderly women who participate in physical activity and leisure engagements may experience an increase in quality of life and well-being (Vagetti et al., 2015; Agahi, Silverstein & Parker, 2011). Because it is more common for women to experience depressive symptoms, it is important to be aware of mental health diagnoses in order to provide necessary supports when needed so that quality of life can be maintained (Del Brutto et al., 2014).

Providing a wellness program that includes sessions focusing on physical health, independent living, cognition, and mental health for elderly community-dwelling women living in rural areas could potentially promote quality of life and overall wellness. By attending or participating in group wellness sessions, elderly women are given an opportunity to make new friends and build relationships, which can prevent social isolation and allow women to engage in social and cultural activities (Shimada et al., 2014). Through the wellness sessions, elderly women can learn about physical and mental health, and can receive the education necessary to remain safe and independent in their homes. Thus, potentially increasing overall quality of life.

CHAPTER III

METHODOLOGY

Participants

This study targeted elderly women ages 60 and older living in central Wyoming. The participants within this study were recruited through snowball sampling methods, church bulletins, and fliers. The fliers were distributed throughout various locations within the community including churches, apartment buildings, and a senior center. The participants were recruited in August of 2016. The group program began in September of 2016 and lasted through October of 2016. Researchers contacted local churches in Central Wyoming to request sharing information to obtain potential participants. To participate in this study, participants had to be 60 years of age and older who were community dwelling in rural areas in Wyoming. The excluding criteria included men and any other individuals who were 59 years of age or younger. Eight individuals completed the initial assessment. There were 2 participants who dropped out of the study. One of the participants dropped out after the first week, and another participant dropped out after the third week. Results from a total of six participants who completed the pre- and post-assessment were included for data analysis.

Measures

The WHO-QOL BREF was administered to all participants at the first group session and last group session (World Health Organization Quality of Life Group, 1997).

The WHO-QOL BREF is a shorter version of the World Health Organization Quality of Life 100 assessment. The WHO-QOL BREF assessment is a 26 item self-report questionnaire. This questionnaire addressed the topics of physical health, psychological health, social relationships, general health, environments, and the association with quality of life. Each question on the assessment was rated using a 5-point Likert scale, with 1 being low and 5 being high. The WHO-QOL BREF was completed individually and independently, and took each participant between 5 and 15 minutes to complete. The outcomes measure is a reliable and valid instrument. According to von Steinbuchel, Lischetzke, Gurny, Eid (2006), the “WHOQOL-BREF item scores are reliable and valid indicators of specific QOL facets among older people” (p.122).

Procedure

Human subject approval was obtained from the University of North Dakota’s Institutional Review Board (IRB). Written informed consent was obtained from each participant prior to the first session of the program. The WHO-QOL BREF was administered at the first and last (seventh) sessions of the group program.

The researchers led seven one-hour group wellness sessions. The topics that were covered within the wellness program included physical and mental health, cognition, and independent living. Throughout the wellness program, the participants also were given the opportunity to engage in social participation with a variety of individuals, including high school students and other elderly women.

The sessions took place at a local Lutheran church in Central Wyoming. The local Lutheran church setting was chosen for its centrality in the city and for its’ connections to elderly women. The group protocol (Peinovich, Triller, & Stube, 2016)

that was used in this study was intended for elderly community-dwelling women in a rural setting. Since the researchers were Masters of Occupational Therapy students, a supervising licensed occupational therapist attended each session and provided oversights within the study. Participants were given a \$10 gift card to Perkins Family Restaurant for their participation in the study.

Tools for Data Analysis

This research study utilized a mixed methods research design. Quantitatively, a pre-/post- test approach was applied to the WHO-QOL BREF assessment. Statistical Package for the Social Science (SPSS) was used to analyze the data collected using paired t-tests. The alpha level that was used was 0.05. A qualitative approach was used to summarize feedback from a survey and written summaries after each session took place. One of the research questions for the quantitative approach was “did the seven-week program increase the quality of life within the participants?”. Qualitatively, the research questions included “in what ways was this wellness program beneficial?” and “were social connections made?”.

CHAPTER IV

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

Presentation, Analysis, and Interpretation of Data

This wellness program was implemented to give elderly community-dwelling women living in rural areas opportunities to engage in social participation and leisure pursuits, while gaining awareness of overall health and how to safely live independently. This seven-week program was intended to increase quality of life by providing opportunities for occupational engagement. A mixed methods study was conducted to determine if the seven-week program enhanced quality of life in the participants' lives as well as to determine if social connections were created among participants.

Presentation of Data

Eight participants completed the informed consent and the World Health Organization Quality of Life Brief (WHO-QOL BREF) within the first session; however, two participants dropped out at weeks 2 and 4. A total of six participants completed the WHO-QOL BREF post assessment in the last session. The demographics for the participants are described in Table 1.

Table 1

Participant Demographics

Pseudonym	Age	Marital Status	Education	Health Problems
Alice	76	Married	Tertiary	None
Eleanor	80	Widowed	Tertiary	None
Judy	64	Divorced	Tertiary	Myasthenia Gravis, Arthritis
Eileen	77	Divorced	Secondary	COPD, Joint Pain, Stiffness
Cindy	66	Single	Tertiary	Rheumatoid Arthritis
Betty	76	Divorced	Tertiary	None

Analysis of Data

The WHO-QOL BREF was used to measure the pre-/post- results focusing on increasing quality of life. The WHO-QOL BREF focuses on mental health, physical health, social factors, and environmental factors. Themes were developed based on qualitative data that was collected throughout the program sessions as well as from a feedback survey that was completed by the participants during the last session.

Data analysis was completed using SPSS and a p value ≤ 0.05 was considered to indicate statistical significance. Due to the small sample size, nonparametric t-tests were utilized to complete data analysis. The figures indicating the changes in the means from the pre-/post- tests were reflected in the correlations and signify that there was a change

in five of the six domains; the change in means did not reach the level of statistical significance.

Quantitative Data Presentation

The following bar graphs are based on the means of the six major domains measured from the participants' responses on the pre-/post- WHO-QOL BREF outcomes measure. Each graph illustrates the differences in the means from pre- to post- measures.

Figure 1 presents the range of scores for domain 1 on the WHO-QOL BREF in both pre- and post-tests. Domain 1 of the WHO-QOL BREF is the physical health domain. Domain 1 consists of questions that focus on "activities of daily living, dependence on medicinal substances and medical aids, energy and fatigue, mobility, pain and discomfort, sleep and rest, and work capacity" (World Health Organization Quality of Life Group, 1997, p. 7). All participants scored 11 or higher at post-assessment in the domain 1 (Figure 1), demonstrating an improvement. In the pre-assessment measure 3 participants scored lower than 11.

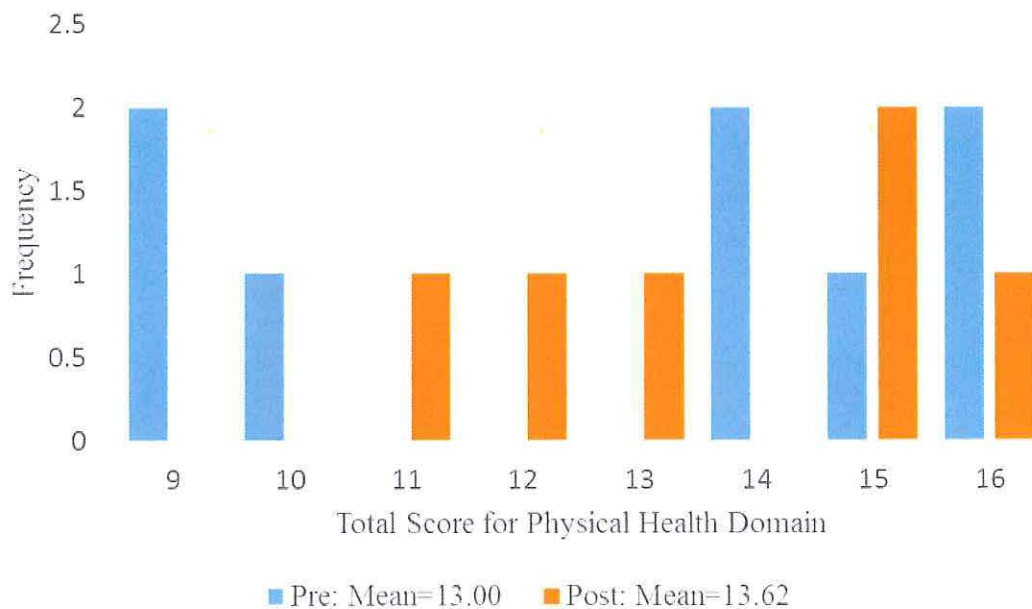


Figure 1. *Frequencies of Physical Health Scores*

Figure 2 displays the range of scores for domain 2 on the WHO-QOL BREF in both pre- and post-tests. Domain 2 of the WHO-QOL BREF is the psychological domain. Domain 2 consists of questions that focus on “bodily image and appearance, negative feelings, positive feelings, self-esteem, spirituality/religion/personal beliefs, thinking, learning, memory and concentration” (World Health Organization Quality of Life Group, 1997, p. 7). In the pre-assessment scores ranged from 9 to 18, but at the post-assessment an increase in scores were noted. Scores on the post assessment ranged from 14-19 (Figure 2).

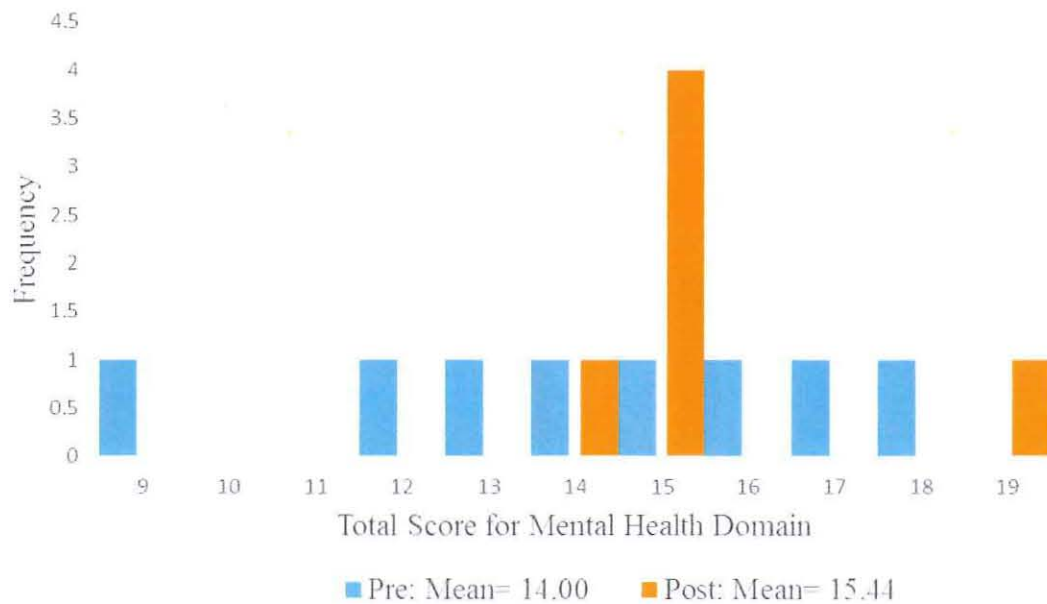


Figure 2. *Frequencies of Psychological Scores*

Figure 3 demonstrates the range of scores for domain 3 on the WHO-QOL BREF in both pre- and post-tests. Domain 3 the WHO-QOL BREF is the social factors domain. Domain 3 consists of questions that focus on “personal relationships, social support, and sexual activity” (World Health Organization Quality of Life Group, 1997, p. 7). The scores in the pre-assessment ranged from 7 to 17, but in the post-assessment scores ranged from 9 to 18 with all but one participant scoring 15 or more.

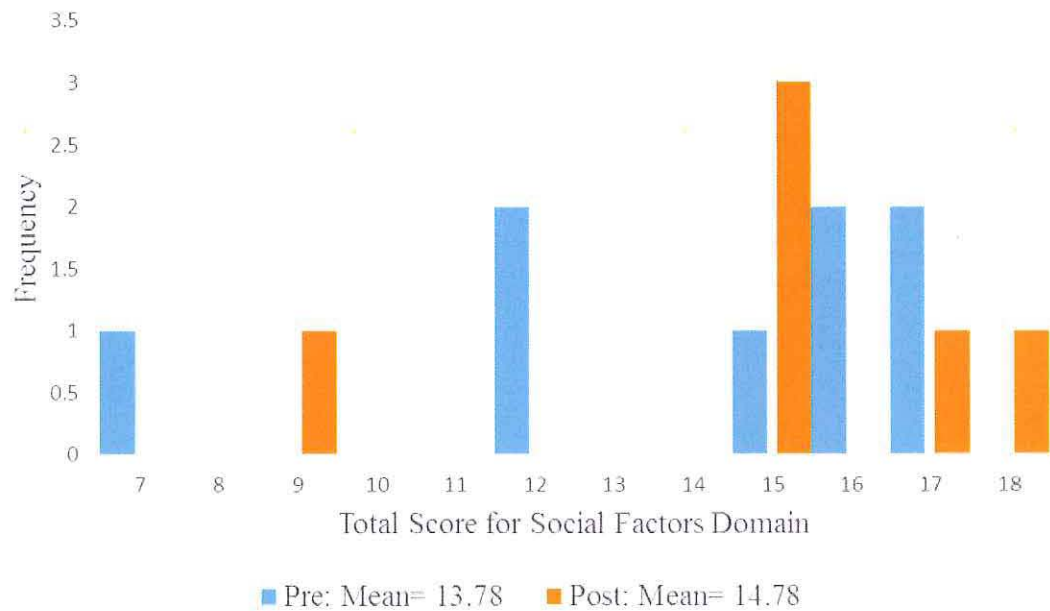


Figure 3. *Frequencies for Social Factors Scores*

Figure 4 illustrates the range of scores for domain 4 on the WHO-QOL BREF in both pre- and post-tests. Domain 4 the WHO-QOL BREF is the environmental factors domain. Domain 4 consists of questions that focus on “financial resources, freedom, physical safety and security, health and social care: accessibility and quality, home environment, opportunities for acquiring new information and skills, participation in and opportunities for recreation/leisure activities, physical environment (pollution/noise/traffic/climate), and transport” (World Health Organization Quality of Life Group, 1997, p. 7). The environmental factors rating was one of the domains that was found to be statistically significant and therefore the pattern of the participants’ answers stayed the same or was minimally changed over the seven-week assessment period.

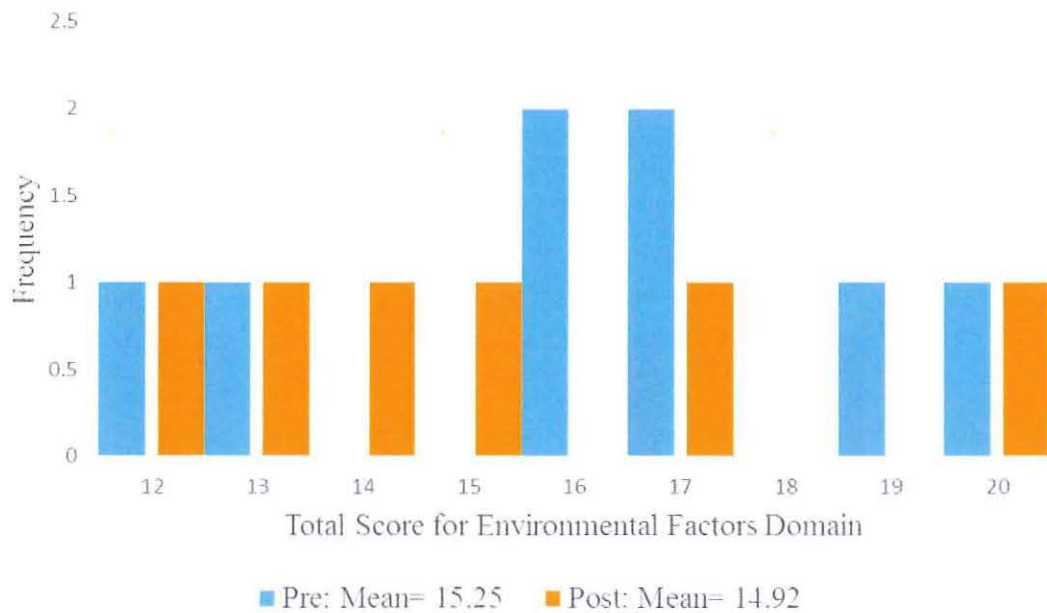


Figure 4. *Frequencies of Environmental Factors Scores*

Figure 5 displays the frequencies of the quality of life rating scores. The frequencies on this bar graph were taken from one question on the WHO-QOL BREF that specifically assessed the participants' quality of life at pre- and post-assessment. Figure 5 illustrates that there was a change from pre- to post- assessment in the extremes on the graph, which indicates that the mean of the participants' responses did increase from pre- to post assessment.

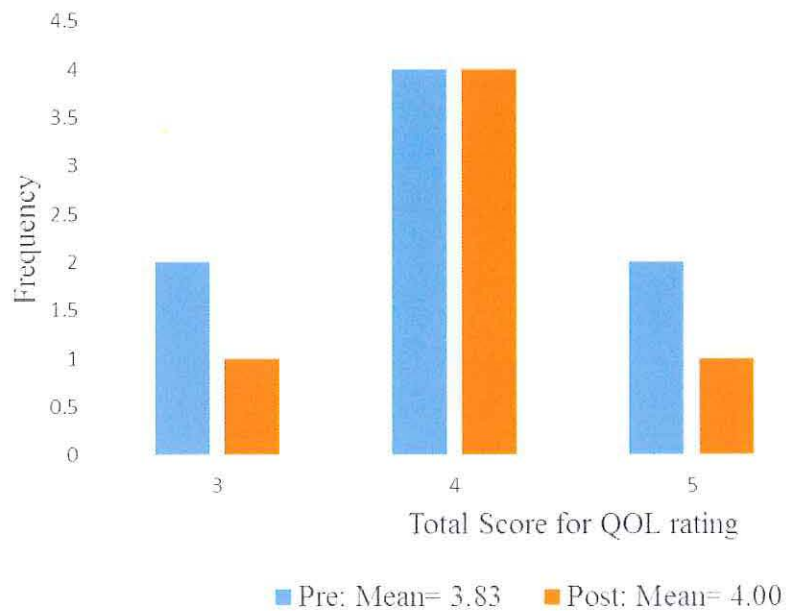


Figure 5. *Frequencies of QOL rating*

Figure 6 shows the frequencies of the overall health rating scores from pre- to post-assessment. The overall health rating was one of the domains that was found to be statistically significant and therefore the pattern of the participants' answers stayed the same or was minimally changed over the seven-week assessment period.

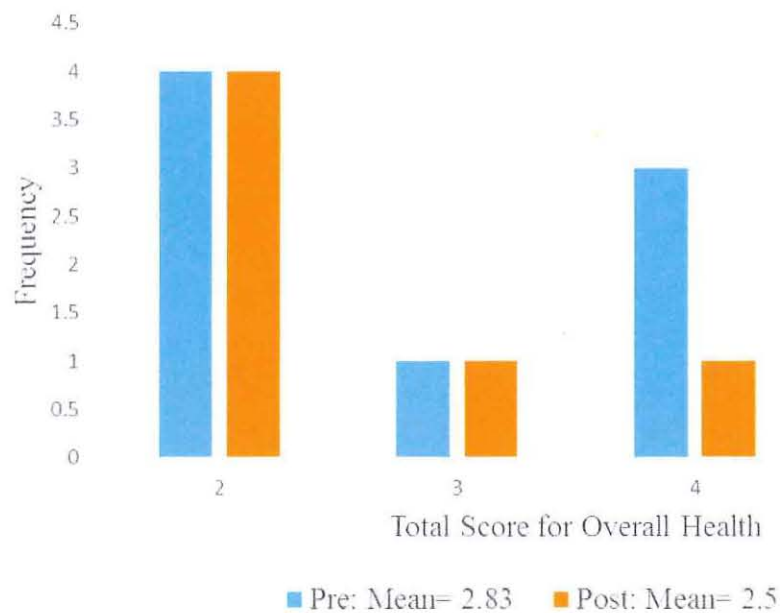


Figure 6. *Frequencies for Overall Health Rating*

Table 2 provides the correlation and mean from the six domains analyzed. The Environmental Factors and Overall Health domains were significant, meaning the pattern of the participants answers stayed the same or minimally changed from pre- to post-assessment. The magnitude of change shows that there was an increase in the mean by at least 1 in the domains of physical health, psychological, and social factors. The environmental factors and overall health domains were found to have a decrease in the mean scores, which indicates a negative magnitude of change.

Table 2

Paired Differences in Means from Pre- to Post- for 6 Participants

	Mean	S.D.	Magnitude of Change	Correlation (r)	p
Physical Health	Pre: 12.57	3.56	1.05	.938	.006
	Post: 13.62	1.86			
Psychological	Pre: 14.00	3.10	1.44	.762	.078
	Post: 15.44	1.66			
Social Factors	Pre: 13.78	3.93	1	.381	.456
	Post: 14.78	3.05			
Environmental Factors	Pre: 15.25	2.42	-0.33	.845	.034
	Post: 14.92	2.99			
Overall QOL	Pre: 3.83	0.75	0.17	.420	.407
	Post: 4.00	0.63			
Overall Health	Pre: 2.83	0.98	-0.33	.851	.032
	Post: 2.5	0.84			

The correlation and significance levels of the pre- and post-assessments when comparing two domains are found in Table 3. There is a correlation between physical health and psychological domains in the pre-assessment with a correlation coefficient of 0.764. There is also a correlation between physical health and psychological domains in the post-assessment with a correlation coefficient of 0.851. This indicates that the participants reported a correlation between the two domains in both pre- and post-assessments. This may be due to the participants looking at overall health when answering questions on physical and psychological rather than two separate domains, which would allow for the two domains to be correlated.

Table 3 also shows a correlation between the environmental factors domain and the psychological in the pre-assessment with a correlation coefficient of 0.874, however a correlation is not found in the post-assessment. There may be underlying reasons for the lack of correlation in the post-assessment between the environmental factors domain and the psychological domain.

Table 3

Correlations Between Domains for 8 Pre- and Six Post- Responses

	Psychological		Social Factors		Environmental Factors	
Pre	r	p	r	p	r	p
Physical Health	.764*	.027	.481	.227	.640	.087
Psychological			.618	.102	.874*	.005
Social Factors					.701	.053
Post						
Physical Health	.851*	.032	-0.277	.595	.348	.499
Psychological			-0.31	.953	.588	.219
Social Factors					.577	.231

(* Indicated significance and correlation between domains)

Correlation

The level of significance that was used while analyzing correlations was $p < 0.05$.

The four domains that had a low correlation and were not significant include physical health, mental health, social factors, and overall quality of life. The two domains that had a high correlation and were significant include environmental factors and overall health. All domains indicated a positive correlation with the exception of environmental factors and overall health, which both indicated a negative correlation.

The domains of physical health and mental health were correlated in both the pre- and post- measures, as referenced in Table 3. This explains that the participants reported a relationship between physical and mental health throughout the study duration. Many of the participants discussed the importance of staying active and exercising their minds with new challenges throughout the group program, and therefore may have seen a relationship between physical and mental health to contribute to quality of life. The domains of environmental factors and overall health were correlated in the pre- measures but not in the post- measures, as referenced by Table 3. One explanation for this may be because as the program progressed, the participants may have increased their awareness of overall health and factors that influence it, including environmental factors.

Differences of Measures

Based on the quantitative data analyzed, there were not any statistically significant results. The level of significance was $p \leq 0.05$. However, despite the lack of significant results, there was a positive shift in the mean scores of the WHO-QOL BREF in four of the six domains that were analyzed. Qualitatively, the participants reported benefitting from participating in the program, specifically by forming social bonds, engaging in conversation with high school girls, increasing awareness regarding health, and learning techniques to remain independent, which all are factors that can contribute to quality of life.

Qualitative Data Presentation

A feedback survey with open-ended questions and Likert rating scale statements were filled out at the last session by each participant. Descriptive statistics were completed using SPSS for the Likert scale rating chart on the feedback survey that was

administered to the participants. The participants rated each statement found in the first column on Table 4 on a Likert scale of 1 through 4. On the Likert scale a rating of a 1 meant the participant “strongly disagreed” with the statement and a rating of a 2 meant the participant “disagreed” with the statement. On the Likert scale a rating of a 3 meant that the participant “agreed” with the statement and a rating of a 4 meant that the participant “strongly agreed” with the statement. There were six participants that completed the Likert rating scale chart on the feedback survey. The minimum rating for each objective was a rating of 3, “agree”. The maximum rating for each objective was a rating of 4, “strong agree”. The means of the Likert scale ratings were found to fall between 3 and 4, which indicates the participants “agreed” or “strongly agreed” with the statements on the feedback survey. These results show that the participants perceived benefits from participating in the program. The results of the descriptive statistics are in Table 4. A copy of the feedback survey is in Appendix D.

Table 4

Descriptive Statistics of Feedback Survey Results

Objectives of the Group	Mean	Std. Deviation
I formed social bonds with the other women in the group.	3.50	0.548
I have learned ideas and examples of ways to stay physically active.	3.33	0.516
I have learned strategies and equipment to use to maintain independence in my home.	3.17	0.408
I have learned methods and activities to use to maintain cognition.	3.17	0.408
I have learned the benefits of writing a life narrative.	3.50	0.548
I have discovered meaning and importance of having interactions with younger generations.	3.50	0.548
I felt an overall increase in quality of life after participating in this group.	3.17	0.408

Summaries were also written by the researchers after each session which included the number of participants that attended, the topic covered, the participants' reactions, and influential moments that were experienced throughout the session. From the summaries and feedback survey, categories were developed into five themes. The five themes include overall health, independent living, intergenerational discussion, social bonds and interactions, and quality of life. Lastly, the five themes were used to develop

the final assertion of the study: Although the results of the WHO-QOL BREF were not statistically significant, the participants described the importance of overall health, living independently within the community, forming social bonds, having intergenerational discussions, and controlling factors that contribute to overall quality of life.

Overall health.

In this theme, physical health, mental health, and cognition categories were included. During this program, the researchers provided handouts of simple home exercise programs that the participants were encouraged to try at home and incorporate into their daily routines. One of the participants asked the researchers for additional handouts that focused on other forms of exercises such as the use of Therabands®, weights, and stretches. The researchers provided additional handouts at the participants' requests. The participants also discussed what they were currently doing for exercise and what each participant's exercise goals were. Three of the participants stated that they currently walk daily on walking paths near their houses or at the local mall. Based on the feedback survey's Likert scale statement, "I have learned ideas and examples of ways to stay physically active," four participants agreed and two participants strongly agreed with this statement.

During the program, the participants were asked to play a word scramble. Betty stated that she "hates brain games with a passion," but agreed to play anyway. At one point in the program, the participants were asked to find a partner and play a game of Memory, with picture tiles. Eileen stated that she "didn't care" about the game and that she "hates stuff like this." After the discussion, Eileen admitted "I hate feeling stupid and that is probably why I don't find meaning in these sorts of games." Eleanor made a

statement regarding cognition, “I play piano and I go to plays to keep up with cognition.” Based on the feedback survey’s Likert scale statement, “I have learned methods and activities to use to maintain cognition,” five participants agreed and one participant strongly agreed with this statement. Overall, the participants recognized value in health and gained awareness on health aspects that may be changing with aging such as physical health, mental health, and cognition.

Independent living.

The program included a discussion regarding adaptive equipment and other techniques that help women continue to be independent within their daily life activities. The researchers showed the participants how various pieces of adaptive equipment worked and gave them time to utilize and practice using the adaptive equipment. The participants also offered additional ideas and strategies they were utilizing that were not mentioned by the researchers. Betty stated that she has used a lot of adaptive equipment at home and is familiar with the equipment that the researchers brought. Based on the feedback survey’s Likert scale statement “I have learned strategies and equipment to use to maintain independence in my home”, five participants agreed and one participant strongly agreed with this statement. Overall, the participants valued being independent and identified strategies to maintain independent living through use of adaptive equipment.

Intergenerational discussion.

The program included an opportunity for the elderly women to meet and share life narratives with younger women in high school. The participants were apprehensive to share life narratives and did not think the high school girls would be receptive to what

they had to say. The participants were surprised at how intelligent, polite, and kind the high school girls were. The high school girls stated that they learned many things from the older women such as to “follow your dream and fight for it” and to “never give up.” The participants and high school girls exchanged phone numbers, addresses, and email addresses in order to maintain a relationship outside of the group program. Based on the feedback survey’s Likert scale statement, “I have discovered meaning and importance of having interactions with younger generations,” three participants agreed and three participants strongly agreed with this statement. Overall, both generations expressed positive take away messages from each other and appreciated the opportunity to engage in an intergenerational discussion.

Social bonds and interactions.

The participants of the study emphasized the significant social bonds and interactions that were made throughout the program. The participants also enjoyed the opportunity to engage in conversation and share stories with younger women. Alice stated, “I enjoyed the interaction between the participants of this program.” A few participants also exchanged contact information amongst the group during the program to meet up after the group program ended. When asked if the program met the participant’s expectations and how expectations were met, Eleanor stated, “Yes. Interaction with other participants, and a couple who are willing to go with me to cultured events.” Eleanor and another participant exchanged contact information partway through the program to go to a play together. Social bonds and interactions were not only formed among participants, but between the participants and high school girls, too. A potluck occurred at the conclusion of the group program. The high school girls wanted to continue to get

experience talking with the older women, so they asked if they could also attend the potluck. The participants were thrilled and excited to have the high school girls join them at the potluck. The participants and high school girls exchanged contact information to keep in touch after the program ended. The high school girls even invited the participants to their choir concert that took place the following week. Based on the feedback survey's Likert scale statement, "I formed social bonds with the other women in the group," three participants agreed and three participants strongly agreed with this statement. Overall, the participants valued the social bonds that were created among both generations and expressed interest in maintaining those friendships outside of the group program.

Quality of life.

Quality of life was monitored from beginning to end of the program through subjective statements. Betty stated that the program, "lets me know I'm not alone in life...forced me to come out of my comfort zone." Eileen also added to that by saying this program, "has given me specific goals and tools to improve my daily life." Based on the feedback survey's Likert scale statement, "I felt an overall increase in quality of life after participating in this group," five participants agreed and one participant strongly agreed with this statement. Overall, the participants felt an increase in quality of life by actively engaging in the program and were willing to step out of their comfort zone to learn about factors contributing to their quality of life.

Interpretation of Data

Quantitatively, the stated hypothesis of increasing quality of life as measured by the WHO-QOL BREF over the 7-week program was not achieved with statistical significance. However, the mean scores of four of the six domains on the WHO-QOL

BREF did positively increase over the 7-week program period. Five of the participants agreed and one participant strongly agreed with the statement, “I felt an overall increase in quality of life after participating in this group,” based on the feedback survey.

Qualitatively, the stated hypothesis that the participants in the wellness program will describe an overall increase in social participation and connections, as measured by the feedback survey completed at the conclusion of the 7-week program was achieved. The participants reported that they benefitted from participating in the program and especially enjoyed the social bonds that were created with other participants as well as the high school girls.

The previous literature supports the findings of this program. An important outcome to measure includes quality of life, especially for those older adults who live in rural areas (Scogin et al., 2016). Measuring quality of life may suggest pertinent information for creating evidence based interventions to improve health outcomes (Scogin et al., 2016). Previous research indicates many barriers in rural areas for older adults, such as a lack of resources (Bacsu et al., 2016). By providing a wellness program, factors that influence quality of life can be addressed in rural areas.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Findings

The women who live in rural areas and are community dwelling face challenges due to living in a rural area. Some of the challenges include not having opportunities to engage in social interactions as well as not having the resources to provide health awareness, which can lead to an overall decrease in quality of life (Averill, 2012; Bacsu et al, 2016).

This study utilized a mixed methods research design. The quantitative data was gathered using a pre-/post- design with the WHO-QOL BREF assessment. Qualitative data was gathered from a feedback survey at the conclusion of the group program, as well as from summaries that the researchers created at the end of each group session while carrying out the group program.

It was hypothesized that by participating in this seven-week group wellness program, the women would experience an increase in quality of life. After completing quantitative data analysis there was not a statistical significance found from pre- to post- assessment in increasing quality of life among the participants of this study. However, despite not finding significant statistical data, five participants “agreed” and one participants “strongly agreed” with the feedback survey’s Likert scale statement, “I felt an overall increase in quality of life after participating in this group”. One participant wrote on the

feedback survey that that this program “has given me specific goals and tools to improve my daily life.” Overall, the participants felt an increase in quality of life by actively engaging in the program and were willing to step out their comfort zone to learn about factors contributing to their quality of life.

It was also hypothesized that the participants of the study would describe an overall increase in social participation and connections with other group members by the end of the seven-week group program. Group sessions focused on helping the women identify ways to create social bonds and participation. The qualitative data suggests that the women enjoyed the group and were able to make social connections as well as identify techniques to remain independent within their homes. Particularly, the women enjoyed the intergenerational discussion and having the opportunity to engage with girls of a younger generation. Overall, the participants felt an increase in quality of life by actively engaging in the program and were willing to step out of their comfort zone to learn about factors contributing to their quality of life.

Conclusion

This program had an impact on the participants within this study, but the sample size was not large enough to show statistical significance. Although the results of the WHO-QOL BREF were not statistically significant, qualitatively the participants described the importance of overall health, living independently within the community, forming social bonds, having intergenerational discussions, and controlling factors that contribute to overall quality of life. Programs of this nature can be used in occupational therapy practice to promote health, well-being, social participation, and leisure engagements for older individuals living in rural areas. By implementing wellness

programs similar to the one within this study, elderly individuals living in rural areas can benefit by gaining awareness of health, forming social connections, and engaging in educational sessions.

Recommendations

For future studies similar in nature, it is recommended to use a different outcomes measure that focuses on social participation or mental health due to difficulties in identifying change in quality of life over a seven-week period. Another future suggestion includes using a longer program timespan and/or longer session durations. The participants enjoyed getting to know one another and the discussion portion of the group program often lasted longer than one-hour. It would also be beneficial to utilize a larger sample size to increase the potential for statistical significance, as well as to incorporate intergenerational learning experiences into more of the sessions throughout the program due to the enjoyment the participants received from the collaboration.

APPENDICES

APPENDIX A: Letters of Support

To: Brianna Berendt and Carly Hill

Cc: Dr. Janet Jedlicka

Subject: Elderly Women's Group Letter of Support

Dear Ms. Berendt and Ms. Hill:

As co-advisor for your independent study on leading a wellness group session at Our Saviour's Lutheran Church I am happy to serve as the supervising licensed therapist in Wyoming. I look forward to working with the both of you and being part of carrying out the proposed study and the final product.

Sincerely,



Nicole Harris, MOT, OTR/L

Instructor
Occupational Therapy - Wyoming Site
University of North Dakota
125 College Drive
Casper, WY 82601
(307) 268-3126
nicole.c.harris@med.und.edu



Our Saviour's Lutheran Church ELCA

318 East Sixth Street
Casper, WY 82601
307-237-9087
April 14, 2016

To: Carly Hill and Brianna Berendt
From: Tina Wulf, Office Manager
Subject: Elderly Women's Group Letter of Support Outline

Dear Ms. Hill and Ms. Berendt:

On behalf of Our Saviour's Lutheran (OSL) Church, I am writing to you to confirm that OSL agrees to host the Elderly Women's Group during the fall of 2016.

OSL will make available our parking lot and Fellowship Hall to accommodate the event, and we will also welcome the elderly women of OSL to participate by "spreading the word" in the months preceding the event.

OSL has reviewed the group protocol and plan for implementing the group and study and agrees to allow our facilities to be used by the group one hour a week for seven weeks this Fall.

Sincerely,

Tina Wulf
Office Manager

-----A Congregation of the Evangelical Lutheran Church in America, Rocky Mountain Synod-----

APPENDIX B: Recruitment Flyer & Description

WISE & WELL

Starting Monday September 12th from 6-7pm

A WELLNESS PROGRAM FOR OLDER WOMEN IN CASPER, WYOMING



This 7-week program will provide fun social and leisure opportunities for older women in Casper, WY. Each week will address a different topic that is relevant to the lives of many older women. Education on safety and positive physical and mental health will be a main focus of the program, as well as creating lasting relationships with other women in the community. The program will be held at the Our Saviour's Lutheran Church in Casper, WY and is free of cost to all participants. The one-hour program sessions will be held once a week for seven weeks. This program starts on September 12th from 6-7pm! We are graduate students at the University of North Dakota, and we are doing research on the effectiveness of this group in increasing your quality of life! We are asking participants to fill out a questionnaire at the start and at the end of the group. Your participation is voluntary and you will be anonymous when we share results. If you interested in joining us, please contact Brianna or Carly

Meet New People

**Explore New
Activities and
Possibilities
within Your
Community**

**Learn How to
Continue Living
Safely As an
Independent
Woman**

**Community
Engagement**

**Coffee and Snacks
Always Provided**

**BRIANNA, OTS &
CARLY, OTS**

UND Occupational
Therapy Department
125 College Dr, Room 306
Casper, WY 82601

<http://www.med.und.edu/occupational-therapy>

Brianna 320-360-0628
Carly 701-520-1840

APPENDIX C: Informed Consent

**THE UNIVERSITY OF NORTH DAKOTA
CONSENT TO PARTICIPATE IN RESEARCH**

TITLE: *Wise and Well: A Pilot Study on the Effects of Providing a Wellness Group Protocol to Enhance Occupational Fit among Rural Community Dwelling Elderly Women*

PROJECT DIRECTORS & PHONE #: *Brianna Berendt: 320-360-0628
Carly Hills: 701-520-1840*

DEPARTMENT: *University of North Dakota-Occupational Therapy*

STATEMENT OF RESEARCH

A person who is to participate in the research must give his or her informed consent to such participation. This consent must be based on an understanding of the nature and risks of the research. This document provides information that is important for this understanding. Research projects include only subjects who choose to take part. Please take your time in making your decision as to whether to participate. If you have questions at any time, please ask.

WHAT IS THE PURPOSE OF THIS STUDY?

You are invited to participate in a seven-week group, promoting wellness and increased quality of life for women living in rural communities. You were asked to participate in this study because you are over the age of 60 and are a woman living in a rural community.

This program addresses physical and mental health, as well as social and leisure participation.

As students at UND this will be part of our capstone experience in fulfillment of graduation requirements.

HOW MANY PEOPLE WILL PARTICIPATE?

Approximately 10-12 people will take part in this study that may be held at Our Saviour's Lutheran Church in Casper, WY.

HOW LONG WILL I BE IN THIS STUDY?

Your participation in the study will last seven weeks. You will need to visit the senior center or church basement 7 times. Each visit will take about one hour.

WHAT WILL HAPPEN DURING THIS STUDY?

You will be asked to complete a quality of life checklist at the start of the first and last sessions. The tool that you will be given is the World Health Organization's Quality of Life- Brief (WHOQOL-BREF) form. It will take about 15 minutes to complete the form. The assessment tool focuses on your quality of life living in a rural area. You will then participate in a seven week

group sessions. Each one-hour session will focus on a different topic. Session topics include physical health, self-care tasks, cognition, mental health, and sharing stories with younger females. The sessions will be facilitated by the researchers under the supervision of a licensed occupational therapist.

By signing this consent for you will be agreeing to participate in the group program for seven weeks. All information gathered will be confidential and all data will be reported anonymously. There will be no way to link your responses on the assessment to this consent form. In order to keep your information confidential, pseudonyms will be used to protect your identity when the researchers write a summary of the group activities each day.

WHAT ARE THE RISKS OF THE STUDY?

The researchers do not anticipate anything beyond minimal risk for participation in this study. You may feel uncomfortable in answering some questions or participating in a group setting. You are free to skip any questions in the group or on the quality of life measure. You will need to find transportation and possibly pay for transportation costs in order to get to the group sessions each week.

WHAT ARE THE BENEFITS OF THIS STUDY?

It is hoped that you will benefit from being in this study by making connections with other women and using resources to more fully participate in the community. Other people may benefit if the information provided is meaningful and enhances the quality of life or participants in the group.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You will not have any costs for being in this research study. The only foreseeable cost would be transportation costs to get to the weekly sessions.

WILL I BE PAID FOR PARTICIPATING?

You will not be paid for being in this research study. After completing the last session, you will be given a \$10 gift card for participating in the study.

WHO IS FUNDING THE STUDY?

The University of North Dakota and the research team are receiving no payments from other agencies, organizations, or companies to conduct this research study.

CONFIDENTIALITY

The records of this study will be kept private to the extent permitted by law. In any report about this study that might be published, you will not be identified. Your study record may be reviewed by Government agencies, the UND Research

Development and Compliance office, and the University of North Dakota

Institutional Review Board. Any information that is obtained in this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. You should know, however, that there are some circumstances in which we may have to show your information to other people. For example the law may require us to

show your information to a court or to tell authorities if we believe you have abused a child, or you pose a danger to yourself or someone else.

Identifying information of participants will be guarded by the use of unique numbers that match participants when completing the Quality of Life Assessment. This will prevent any links between the information and you as a participant. Printed research records will be kept in a locked file cabinet and computer files will be kept on password protected computers. The list of participants and unique identifying numbers will be deleted once the final data is entered and verified. Only the researchers, their advisors, and people who audit research procedures for the University of North Dakota will have access to the records.

If we write a report or article about this study, we will describe the study results in a summarized manner so that you cannot be identified.

IS THIS STUDY VOLUNTARY?

Your participation is voluntary. You may choose not to participate or you may discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. Your decision whether or not to participate will not affect your current or future relations with the University of North Dakota. If you decide to leave the study early, we ask that you inform one of the researchers of your wish to discontinue. There will be no consequences for withdrawing from this study.

CONTACTS AND QUESTIONS?

The researchers conducting this study are occupational therapy students in the University of North Dakota Occupational Therapy Program, Casper College site. The researchers are Brianna Berendt and Carly Hills. Please feel free to ask any questions you may have now. If you later have questions, concerns, or complaints about the research please contact Brianna Berendt at 320-360-0628 or Carly Hills at 701-520-1840. You may also contact the research advisor, Dr. Janet Jedlicka, who is supervising the researchers by calling 701-777-2017.

If you have questions regarding your rights as a research subject, you may contact The University of North Dakota Institutional Review Board at (701) 777-4279.

UND.irb@research.UND.edu.

- You may also call this number about any problems, complaints, or concerns you have about this research study.
- You may also call this number if you cannot reach research staff, or you wish to talk with someone who is independent of the research team.
- General information about being a research subject can be found by clicking "Information for Research Participants" on the web site:

<http://und.edu/research/resources/human-subjects/research-participants.cfm>

Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. Your signature is not binding and you may drop out of this study even after signing this document. You will receive a copy of this form that you can keep.

Subjects Name:

Signature of Subject

Date

I have discussed the above points with the participant.

Signature of Person Who Obtained Consent

Date

APPENDIX D: Feedback Survey

Wise and Well Group: Evaluation Survey

Please rate the following on a scale from 1 to 4 with 1 being strongly disagree and 4 being strongly agree:

Objectives	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
I formed social bonds with the other women in the group.				
I have learned ideas and examples of ways to stay physically active.				
I have learned strategies and equipment to use to maintain independence in my home.				
I have learned methods and activities to use to maintain cognition.				
I have learned the benefits of writing a life narrative.				
I have discovered meaning and importance of having interactions with younger generations.				
I felt an overall increase in quality of life after participating in this group.				

Please answer the following questions:

1. What were some aspects of the group program that went well?
2. What were some aspects of the group program that you enjoyed?
3. How has this program benefitted you?
4. How could the facilitators improve? What did they do well throughout the sessions?

5. Were the topics covered satisfactory? Were there different topics that you wished would have been covered?

6. If there is a better time and location to meet, please specify.

7. If there are ways to improve, what would you do differently to make the sessions better?

8. Did this group program meet your expectations? Why or why not?

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